

SOLDERING IRON TIP AND METHOD OF MANUFACTURING SAME

Abstract of the Disclosure

A soldering iron tip having a copper or copper alloy core and a metal particle sintered member connected to the core to transfer heat therefrom to form a working soldering tip. The sintered member can be manufactured by powder metallurgy from a base material (iron, nickel and/or cobalt particles) and an additive (silicon, copper, silver, tin, boron and/or carbon particles) where needed. The sintered member can be formed as a cap which is fitted onto the working tip with a silver paste sandwiched therebetween, a brazing filler metal ring is positioned between an abutment shoulder and the cap, flux applied to the joint and the cap brazed into place. A metal, cermet or ceramic coating sprayed on the outer surface of the core, except for the (masked) working tip end, is not wettable by solder. An Ag-Al-Cu alloy coating layer in the rearwardly-disposed cavity improves heat conduction from the heater therein.